

Port of Glasgow

Received at London Office 11th NOV 1904

No. in Survey held at Glasgow

Date, first Survey 25th May

Last Survey 10th Sept 1904

Reg. Book.

on the S.S. "THE PRESIDENT."

(Number of Visits 27)

Master

Built at Troon

By whom built Ailsa S. B. Co

Tons Gross

Net

When built 1904

Engines made at Glasgow

By whom made Muir & Houston Ltd.

when made 1904

Boilers made at Glasgow

By whom made Muir & Houston Ltd.

when made 1904

Registered Horse Power

Owners J. Hay

Port belonging to Glasgow

Nom. Horse Power as per Section 28 98

Is Refrigerating Machinery fitted No

Is Electric Light fitted No

ENGINES, &c.—Description of Engines Compound - screw. No. of Cylinders 2 No. of Cranks 2

Dia. of Cylinders 20 1/2" + 44" Length of Stroke 30" Revs. per minute 95 Dia. of Screw shaft as per rule 9.57" as fitted 10" Material of iron screw shaft Bedverwals

Is the screw shaft fitted with a continuous liner the whole length of the stern tube no Is the after end of the liner made water tight

in the propeller boss yes If the liner is in more than one length are the joints burned If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive If two

liners are fitted, is the shaft lapped or protected between the liners no lines, bedverwals patent Length of stern bush 3' 4"

Dia. of Tunnel shaft as per rule 8.52" as fitted none Dia. of Crank shaft journals as per rule 8.94" as fitted 9 1/8" Dia. of Crank pin 9 1/8" Size of Crank webs 5 1/4" Dia. of thrust shaft under

collars 9 1/2" Dia. of screw 10.6" Pitch of screw 13.6" No. of blades 4 State whether moveable no Total surface 38 sq. ft.

No. of Feed pumps 2 Diameter of ditto 2 3/4" Stroke 15" Can one be overhauled while the other is at work yes

No. of Bilge pumps 2 Diameter of ditto 3" Stroke 15" Can one be overhauled while the other is at work yes

No. of Donkey Engines Two 2" dia Sizes of Pumps { 7 x 4 1/2 x 8 } 4 x 2 3/4 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room Two 2" dia In Holds, &c. Two 2" dia in forward hold

No. of bilge injections 1 sizes 3" Connected to condenser, or to circulating pump pump Is a separate donkey suction fitted in Engine room & size yes 2 1/2"

Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible none

Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks Valves + cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the discharge pipes above or below the deep water line above

Are they each fitted with a discharge valve always accessible on the plating of the vessel yes Are the blow off cocks fitted with a spigot and brass covering plate yes

What pipes are carried through the bunkers none How are they protected

Are all pipes, cocks, valves, and pumps in connection with the machinery and all boiler mountings accessible at all times yes

Are the bilge suction pipes, cocks, and valves arranged so as to prevent any communication between the sea and the bilges yes

When were stern tube, propeller, screw shaft, and all connections examined in dry dock before launch Is the screw shaft tunnel watertight none

Is it fitted with a watertight door worked from

BOILERS, &c.— (Letter for record (S) Total Heating Surface of Boilers 1540 sq. ft. Is forced draft fitted no

No. and Description of Boilers One single ended Working Pressure 130 lbs Tested by hydraulic pressure to 160 lbs

Date of test 7/9/04 Can each boiler be worked separately Area of fire grate in each boiler 62 1/2 sq. ft No. and Description of safety valves to

each boiler 2 patent spring Area of each valve 8.29 sq. Pressure to which they are adjusted 135 lbs Are they fitted with easing gear yes

Smallest distance between boilers or uptakes and bunkers or woodwork 4' 6" Mean dia. of boilers 14' 3" Length 10' 0" Material of shell plates steel

Thickness 3/8" Range of tensile strength 28 to 32 Are they welded or flanged no Descrip. of riveting: cir. seams double long. seams treble

Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 1/2" Lap of plates or width of butt straps 17"

Per centages of strength of longitudinal joint rivets 86.7 plate 85 Working pressure of shell by rules 135 lbs Size of manhole in shell 16" x 12"

Size of compensating ring McNeil's No. and Description of Furnaces in each boiler 3 plain Material steel Outside diameter 3' 9"

Length of plain part top 6' 0" bottom 8' 7" Thickness of plates crown 1 1/16" Description of longitudinal joint welded No. of strengthening rings none

Working pressure of furnace by the rules 144 lbs Combustion chamber plates: Material steel Thickness: Sides 9/16" Back 9/16" Top 9/16" Bottom 15/16"

Pitch of stays to ditto: Sides 8' x 9" Back 9' x 9" Top 8' x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 135 lbs

Material of stays steel Diameter at smallest part 1.45" Area supported by each stay 81 sq. Working pressure by rules 143 lbs End plates in steam space:

Material steel Thickness 13/16" Pitch of stays 16' x 15" How are stays secured nuts Working pressure by rules 130 lbs Material of stays steel

Area Diameter at smallest part 3.26" Area supported by each stay 240 sq. Working pressure by rules 135 lbs Material of Front plates at bottom steel

Thickness 1 1/16" Material of Lower back plate steel Thickness 1 1/16" Greatest pitch of stays 13' x 9" Working pressure of plate by rules 130 lbs

Diameter of tubes 3 1/2" Pitch of tubes 4' 9 1/2" x 4' 7 1/2" Material of tube plates steel Thickness: Front 1 1/16" + 5/8" doubling Back 5/8" Mean pitch of stays 9 5/8"

Pitch across wide water spaces 14 1/2" Working pressures by rules 171 lbs Girders to Chamber tops: Material iron Depth and

thickness of girder at centre 7' x 2' 7/8" Length as per rule 2' 8" Distance apart 8" Number and pitch of Stays in each 3 - 8"

Working pressure by rules 130 lbs Superheater or Steam chest; how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

If not, state whether, and when, one will be sent? In a Report also sent on the Hull of the Ship? [2000-5-04-Copyable Ink.]



DONKEY BOILER— No. *One* Description *ordinary vertical.*
 Made at *Glasgow* By whom made *Muir Houston Ltd* When made *1904* Where fixed *in stokehold*
 Working pressure *90* tested by hydraulic pressure to *140 lbs* No. of Certificate *7256* Fire grate area *16 1/2* Description of safety valves *patent spring*
 No. of safety valves *one* Area of each *7.07* Pressure to which they are adjusted *45 lbs* If fitted with easing gear *yes* If steam from main boilers can enter the donkey boiler *no* Dia. of donkey boiler *5' 0"* Length *10' 6"* Material of shell plates *steel* Thickness *3/8"* Range of tensile strength *27-32* Descrip. of riveting long. seams *double (lap)* Dia. of rivet holes *15/16"* Whether punched or drilled *drilled* Pitch of rivets *3/4"*
 Lap of plating *5"* Per centage of strength of joint Rivets *113* Plates *71.1* Thickness of shell crown plates *5/8"* Radius of do. *4' 6"* No. of Stays to do. *none*
 Dia. of stays. *✓* Diameter of furnace Top *3' 11"* Bottom *4' 5"* Length of furnace *4' 0 3/4"* Thickness of furnace plates *1/2"* Description of joint *welded* Thickness of furnace crown plates *5/8"* Stayed by *✓* Working pressure of shell by rules *92 lbs*
 Working pressure of furnace by rules *101 lbs* Diameter of uptake *15"* Thickness of uptake plates *1/2"* Thickness of water tubes *7/16"*

SPARE GEAR. State the articles supplied:— *Two top end & two bottom end connecting rod bolts, two main bearing bolts, one set of coupling bolts, & one set of feed & bilge pump valves. etc.*

The foregoing is a correct description,
 For **MUIR & HOUSTON, LIMITED,** Manufacturer.

James Stewart

Dates of Survey while building
 During progress of work in shops: 1904, May 25, 30, June 24, 28, July 8, 5, 12, 15, 26, 29, Aug 1, 4, 11, 15, 23, 29.
 During erection on board vessel: Sep 3, 7, 8, 10, 14, 16, 19, 27, 28, Oct 8, 10.
 Total No. of visits: 27

Is the approved plan of main boiler forwarded herewith *Yes*
 " " " donkey " " " *Yes*

General Remarks (State quality of workmanship, opinions as to class, &c.) *This vessel's machinery is the same as that of "The Emperor" Gls Report No 21674.*

*Machinery is aft—
 The Machinery of this vessel has been constructed under special survey, the materials & workmanship are of good quality, it has been securely fitted on board, tried under steam & found satisfactory.*

*In my opinion, it is eligible to be classed in the Register Book, & to have the record of **LMC.10.04***

It is submitted that this vessel is eligible for **THE RECORD LMC.10.04**

J.S.
 2.11.04
P.M.S.
 2.11.04

Certificate (if required) to be sent to

The amount of Entry Fee. . . £ 1 : :
 Special £ 14 : 14 :
 Donkey Boiler Fee £ : :
 Travelling Expenses (if any) £ : :
 Committee's Minute **Glasgow 31 OCT 1904**

When applied for, -1. NOV. 1904
 31. OCT. 1904
 When received, 1. 12. 04

J.W. Dimmock
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Assigned

+ L.M.C. 10.04
Witness fee is paid

